

In the Specification:

Please insert the following paragraphs after the paragraph beginning on page 20, line 5:

In accordance with the preceding discussion of Figures 6-9, the present invention provides a method for performing a requested job by a system that comprises multiple processing servers and a management server for managing the multiple processing servers. Each processing server is adapted to execute a program assigned thereto from among multiple programs for performing the requested job. The management server generates an execution direction. The execution direction may include: identification information identifying each of the multiple programs, input and/or output files for each of the multiple programs, and an execution order of the multiple programs for performing the requested job. The execution order identifies a first program of the multiple programs to be executed before any other program of the multiple programs is executed. The management server sends to a first processing server of the multiple processing servers, the execution direction and input data for subsequent execution of the first program. The first processing server executes the first program using the input data as input, wherein said executing the first program results in said input data being updated. After said executing the first program, the first processing server sends to the management server an inquiry for identification information that identifies a second processing server to execute a second program included in the execution direction. After sending the inquiry, the first processing server receives from the management server the identification information. The first processing server sends to the second processing server the execution direction and the updated input data for subsequent execution of the second program.

After said receiving the execution direction and input data, the first processing server may

send to the management server a receiving notification indicating that the first processing server has received the execution direction and input data sent by the management server.

After completion of said executing the first program, the first processing server may send to the management server a termination notification indicating that the first processing server has completed execution of the first program.

After said sending, by the first processing server to the second processing server the execution direction and the updated input data for subsequent execution of the second program, the second processing server is designated as a current processing server, the second program is designated as a current program, and the updated input data is designated as current input data, and the method further comprises executing a loop that comprises at least one iteration such that executing the loop comprises performing each iteration of the at least one iteration, wherein each iteration when performed is designated as a current iteration.

Performing each iteration of the loop may comprises: if the current processing server is unable to execute the current program then the current program is not executed by the current processing server; otherwise execution of the current program by the current processing server is initiated using the current input data as input, which results either in completion of executing the current program by the current processing server with the current input data being updated or an occurrence of a fault during said executing the current program by the current processing server; if said execution of the current program by the current processing server is initiated and completed, then after completion of executing the current program by the current processing server: sending, by the current processing server to the management server, either a completion notification to indicate that performance of the requested job has been completed or an inquiry

for identification information that identifies a next processing server to execute a next program included in the execution direction; if the inquiry has been sent then after said sending the inquiry and receipt thereof by the management server, the method may comprise: sending, by the management server to the current processing server, the identification information; and sending, by the current processing server to the next processing server, the execution direction and the updated input data for subsequent execution of the next program to end the current iteration, wherein for the next iteration is to be performed: the next processing server is designated as the current processing server, the next program is designated as the current program, and the updated input data is designated as the current input data.

During an individual iteration of the at least one iteration, said execution of the current program by the current processing server may be initiated and completed. The individual iteration may be the last iteration of the at least one iteration and during said last iteration after said completion of said executing the current program by the current processing server, said sending the completion notification by the current processing server to the management server may be performed. During the individual iteration after said completion of said executing the current program by the current processing server is performed, said sending the inquiry by the current processing server to the management server may be performed.

During an individual iteration of the at least one iteration either the current processing server may be unable to execute the current program or said execution of the current program by the current processing server may be initiated such that said fault occurs during said executing the current program by the current processing server. The method may further comprise during said individual iteration: sending, by the current processing server to a prior processing server

that had sent the execution direction and the updated input data to the current processing server, a refusal notification indicating refusal of the updated input data; sending, by the prior processing server to the management server, an inquiry for different identification information that identifies a different processing server to execute the next program included in the execution direction; sending, by the management server to the prior processing server, the different identification information; and sending, by the prior processing server to the different processing server, the execution direction and the updated input data for subsequent execution of the next program during the individual iteration such that the different processing server is designated as the current processing server during the individual iteration. During the individual iteration, the current processing server may be unable to execute the current program. During the individual iteration, said execution of the current program by the current processing server is initiated such that said fault occurs during said executing the current program by the current processing server.

During an individual iteration of the at least one iteration said execution of the current program by the current processing server may be initiated such that said fault occurs during said executing the current program by the current processing server, wherein the current processing server is unable to send a refusal notification to a prior processing server that had sent the execution direction and the updated input data to the current processing server, wherein the refusal notification if sent would have indicated refusal of the updated input data. The method further comprises during said individual iteration: determining, by the management server, that said fault has occurred; sending, by the management server to the prior processing server, a fault occurrence notification indicating that said fault has occurred; selecting, by the management server a different processing server to execute the next program included in the execution

direction; and sending, by the prior processing server to the different processing server, the execution direction and the updated input data for subsequent execution of the next program during the individual iteration such that the different processing server is designated as the current processing server during the individual iteration.

During an individual iteration of the at least one iteration said execution of the current program by the current processing server may be initiated such that said fault occurs during said executing the current program by the current processing server. The method may further comprises during said individual iteration: determining, by the management server, that said fault has occurred and that the requested job cannot be performed by avoiding said fault; and sending, by the management server to all prior servers that have performed a prior execution of a program of the multiple programs during any prior iteration of the at least one iteration, a restoration directive to restore all data changed during said prior execution by said all prior servers.

Thus, a system comprising the multiple processing servers and the management server for managing the multiple processing servers may be adapted to perform the preceding method.

Moreover, storage media may comprise a computer readable control programs embodied therein, said control programs adapted to be executed by the management server and the multiple processing servers to perform the preceding method.